

IN THE CLAIMS:

Claims 1, 146, 148-153, 155-164 are amended herein. Claims 147 and 154 are canceled. All pending claims are produced below.

1. (Currently Amended) A method of mitigating one or more symptoms associated with chronic consumption of a substance of abuse by a mammal, wherein said substance of abuse is alcohol, said method comprising:

administering to said mammal an effective amount of an adenosine receptor antagonist[[:]] and an effective amount of a dopamine receptor antagonist;

~~wherein the effective amount of the adenosine receptor antagonist is lower than the effective amount of an adenosine receptor antagonist administered without said dopamine receptor antagonist~~

wherein said administering of said adenosine receptor antagonist and said dopamine receptor antagonist enhances the potency of said adenosine receptor antagonist.

2.-20. (Canceled).

21. (Withdrawn) A composition comprising an effective amount of an adenosine receptor antagonist; and an effective amount of a dopamine receptor antagonist, wherein the effective amount of the adenosine receptor antagonist is lower than the effective amount of an adenosine receptor antagonist administered without said dopamine receptor antagonist.

22.-35. (Canceled).

36. (Withdrawn) A method of mitigating one or more symptoms associated with withdrawal associated with cessation of consumption of a substance of abuse by a mammal, said method comprising:

administering to said mammal an effective amount of an adenosine receptor agonist; and

an effective amount of a dopamine receptor agonist;

wherein the effective amount of the adenosine receptor agonist is lower than the effective amount of an adenosine receptor agonist administered without said dopamine receptor agonist.

37.-57. (Canceled).

58. (Withdrawn) A composition for mitigating a symptom of withdrawal from a drug of abuse, said composition comprising an effective amount of an adenosine receptor agonist; and an effective amount of a dopamine receptor agonist, wherein the effective amount of the adenosine receptor agonist is lower than the effective amount of an adenosine receptor agonist administered without said dopamine receptor agonist.

59.-77. (Canceled).

78. (Withdrawn) A method of mitigating one or more symptoms associated with chronic consumption of a substance of abuse by a mammal, said method comprising inhibiting expression or activity of a beta/gamma dimer.

79.-85. (Canceled).

86. (Withdrawn) A method of mitigating consumptive behavior or craving after withdrawal of a substance of abuse, said method comprising:

administering to a mammal an agent that increases effective adenosine levels or activity of an adenosine receptor in a concentration sufficient to mitigate said consumptive behavior or craving.

87.-92. (Canceled).

93. (Withdrawn) A method of mitigating consumptive behavior or craving during chronic consumption of a substance of abuse, said method comprising:

administering to a mammal engaging in said chronic consumption of a substance of abuse, an adenosine receptor antagonist in a concentration sufficient to mitigate said consumptive behavior or craving.

94. (Canceled).

95. (Withdrawn) A method of screening for an agent that modulates the effect of a substance of abuse on PKA activation in a mammalian cell, said method comprising:

contacting a mammalian test cell with a test agent; and

detecting the expression or activity of a beta/gamma dimer of said test cell wherein a difference in beta/gamma dimer expression or activity in said test cell as compared to beta/gamma dimer expression or activity in a control cell indicates that said test agent modulates the effect of a substance of abuse on PKA activation.

96.-117. (Canceled).

118. (Withdrawn) A method of screening for an agent that decouples dopamine receptor activity from an adenosine receptor pathway, said method comprising:

contacting a test cell comprising a dopamine receptor with a test agent;

detecting the expression or activity of a beta-gamma dimer wherein a decrease in beta/gamma dimer expression or activity in said cell as compared to beta/gamma dimer expression or activity in a control cell indicates that said test agent decouples dopamine receptor activity from an adenosine receptor pathway.

119. (Withdrawn) A method of prescreening for an agent that modulates the effect of a substance of abuse on PKA activation in a mammalian cell, said method comprising:

i) contacting a beta/gamma dimer or a nucleic acid that encodes a polypeptide comprising a beta/gamma dimer with a test agent; and

ii) detecting specific binding of said test agent to a beta/gamma dimer or to a nucleic acid that encodes a polypeptide comprising a beta/gamma dimer wherein specific binding indicates that said agent is a candidate agent modulates the effect of a substance of abuse on PKA activation in a mammalian cell.

120.-133. (Canceled).

134. (Withdrawn) A composition comprising an adenosine receptor antagonist and a dopamine receptor antagonist in a pharmacologically acceptable excipient.

135.-136. (Canceled).

137. (Withdrawn) A kit comprising:

a container containing an adenosine receptor antagonist; and

a container containing a dopamine receptor antagonist.

138.-141. (Canceled).

142. (Withdrawn) A composition comprising an adenosine receptor agonist and a dopamine receptor agonist in a pharmacologically acceptable excipient.

143.-144. (Canceled).

145. (Withdrawn) A kit comprising a container containing an adenosine receptor agonist; and a container containing a dopamine receptor agonist.

146. (Currently Amended) The method of claim 1, ~~wherein the effective amount of the dopamine receptor antagonist is lower than the effective amount of a dopamine receptor antagonist administered without said adenosine receptor antagonist~~ wherein said administering of said adenosine receptor antagonist and said dopamine receptor antagonist enhances the potency of said dopamine receptor antagonist.

147. (Canceled)

148. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said dopamine receptor antagonist is administered at a standard therapeutic dosage.

~~[[148]]~~ 149. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said dopamine receptor antagonist is administered at about a threshold dosage.

~~[[149]]~~ 150. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said dopamine receptor antagonist is administered at a sub-threshold dosage.

~~[[150]]~~ 151. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said adenosine receptor antagonist is administered at a standard therapeutic dosage.

~~[[151]]~~ 152. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said adenosine receptor antagonist is administered at about a threshold dosage.

~~[[152]]~~ 153. (Currently Amended) The method of claim 1, wherein ~~[[the]]~~ said adenosine receptor antagonist is administered at a sub-threshold dosage.

~~[[153]]~~ 154. (Canceled)

~~[[154]]~~ 155. (Currently Amended) The method of claim 1, wherein said dopamine receptor antagonist is selected from the group consisting of butaclamol, chlorpromazine,

domperidone, fluphenazine, haloperidol, heteroaryl piperidines, metoclopramide, olanzapine, perospirone hydrochloride hydrate, phenothiazine, pimozide, quetiapine, risperidone, sertindole, sulpiride, ziprasidone, and zotepine.

[[155]] 156. (Currently Amended) The method of claim 1, wherein [[the]] said effective dosage of the dopamine receptor antagonist is sufficiently low so as ~~enough~~ to avoid causing an adverse symptom characteristically produced by administration of a dopamine receptor antagonist.

[[156]] 157. (Currently Amended) The method of claim [[155]] 156, where said adverse symptom is selected from the group consisting of tardive dyskensia, dystonia, and neuroendocrine (hormonal) disturbances.

[[157]] 158. (Currently Amended) The method of claim 1, wherein said adenosine receptor antagonist is selected from the group consisting of PD 115,199; ZM 241385, quinazoline, 3-(3-hydroxyphenyl)-5H-thiazolo[2,3b]-guinazoline, 1,3-diethyl-8-phenylxanthine, and substituted phenylxanthines.

[[158]] 159. (Currently Amended) The method of claim 1, wherein [[the]] said effective dosage of the adenosine receptor antagonist is sufficiently low so as ~~enough~~ to avoid causing an adverse symptom characteristically produced by administration of an adenosine receptor antagonist.

[[159]] 160. (Currently Amended) The method of claim [[158]] 159, where said adverse symptom is selected from the group consisting of sleep disorders, elevated heart rate, and arrhythmia.

[[160]] 161. (Currently Amended) The method of claim 1, wherein [[the]] said dopamine

receptor antagonist and [[the]] said adenosine receptor antagonist are administered sequentially.

[[161]] 162. (Currently Amended) The method of claim 1, wherein [[the]] said dopamine receptor antagonist and [[the]] said adenosine receptor antagonist are administered simultaneously.

[[162]] 163. (Currently Amended) The method of claim 1, wherein [[the]] said dopamine receptor antagonist and [[the]] said adenosine receptor antagonist are administered in a single unit dosage formulation.

[[163]] 164. (Currently Amended) The method of claim 1, wherein said symptom is a chronic consumptive behavior.